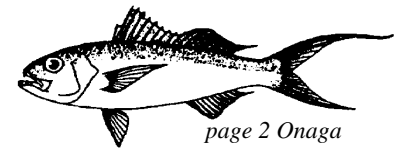


■ DLNR - DIVISION OF AQUATIC RESOURCES ■

# CURRENT LINE FISH FACTS for *Bottom Fishes of Hawaii*



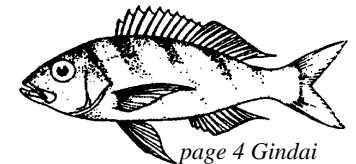
page 1 `Opakapaka



page 2 Onaga



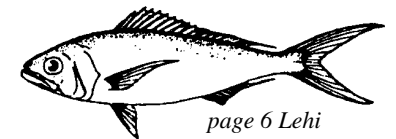
page 3 Ehu



page 4 Gindai



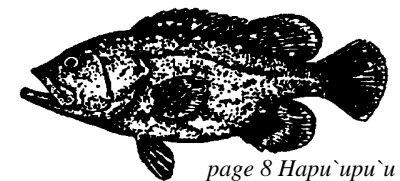
page 5 Kalekale



page 6 Lehi



page 7 Uku



page 8 Hapu`upu`u



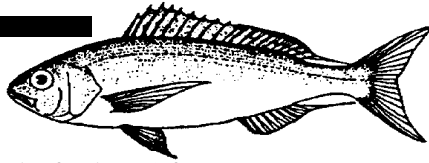
page 9 Kahala



page 10 Butaguchi

## 'Opakapaka, Pink Snapper

*Pristipomoides filamentosus*



### SIZES

**Length:** large specimens will reach a length of at least 3 feet

**Weight:** up to about 20 pounds

### BREEDING

**Sexual Maturity:** females generally reach spawning condition at a fork length of 19.2 inches. Opakapaka reach sexual maturity at about 1.8 years and generally spawn at about 2.2 years.

**Spawning:** spawning season is from June through November, with spawning peaks in August.

### LIFESTYLE

**Habitat:** deeper offshore water beyond the reef. Occurs over rocky bottoms; usually caught between 40 to 120 fathoms. There seems to be a relationship between size of fish and depth during daylight hours. Fish apparently migrate into shallower depths at night.

**Diet:** Diurnal and nocturnal, feeds on small fishes, squids, shrimps, crabs, pyrosomes, and zooplankton

**Life Span:** maximum known age 18 yrs.

**Distribution:** Indopacific: from East Africa to Hawaii and Tahiti, and northward from eastern Australia and Lord Howe Island to southern Japan.

### RELATED SPECIES

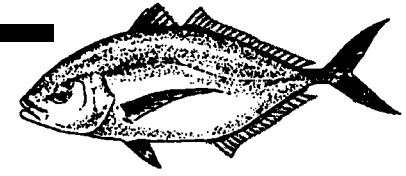
The opakapaka is a member of the Snapper Fish Family which includes other commercially important species such as onaga and ehu. Collectively known as Bottom Fish, these important food fish are captured by deep sea handline.

The following table will give you an idea of how fast these fish grow and how old they are. Please note that these are just ball park figures and meant only to give you a general idea on the relationship of length, weight, and age.

<i>Length, Weight and Age of Opakapaka</i>		
Fork Length (inches)	Weight (pounds)	Age (years)
6		0.8
10	0.7	1.5
13	1.5	2.2
15	2.25	2.8
18	4	4.1
20	5	5
24	8.8	8
27	11.25	14
29	14	18

## Butaguchi, Pig Ulua

*Pseudocaranx dentex*



### SIZES

**Length:** will reach a lengths of up to 4 feet

**Weight:** up to about 40 pounds

### BREEDING

**Sexual Maturity:** unknown.

**Spawning:** unknown.

### LIFESTYLE

**Habitat:** found at depths between 5 to 100 fathoms.

**Diet:** Diurnal and nocturnal, feeds on fishes, shrimps, crabs, and octopus.

**Life Span:** unknown.

**Distribution:** Western and Eastern Atlantic and Indo-pacific regions.

### RELATED SPECIES

The butaguchi is a member of the Jack Fish Family which includes other species such as kahala, all the uluas, omaka, opelu, akule, lae, and rainbow runner. This species is captured primarily by deep sea handline and contributes to bottom fish landings from the Northwestern Hawaiian Islands.

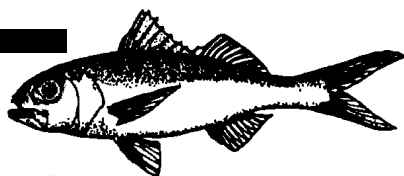
The following table will give you an idea of how fast these fish grow and how old they are. Please note that these are just ball park figures and meant only to give you a general idea on the relationship of length, weight, and age.

<i>Length, Weight and Age of Butaguchi</i>		
Fork Length (inches)	Weight (pounds)	Age (years)
11	0.85	1
18	3.74	2
24	9	3
28	14	4
31	19	5
34	25	6
37	33	8
39	38	9
40	41	10

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## Ehu, 'Ula 'ula, Red Snapper

*Etelis carbunculus*



### SIZES

**Length:** adults will reach a length of at least 24 inches

**Weight:** up to about 12 pounds

### BREEDING

**Sexual Maturity:** Ehu reach sexual maturity at about 11.7 inches fork length. A fish 20 inches in fork length can release over 1.3 million eggs per spawn and may release 2 or more batches during a spawning season.

**Spawning:** spawning season is from May through October.

### LIFESTYLE

**Habitat:** inhabits deeper offshore water beyond the reef. Occurs over rocky bottoms; usually found between 80 to 218 fathoms.

**Diet:** Feeds on fishes and larger invertebrates such as squids, shrimps and crabs

**Life Span:** unknown.

**Distribution:** Indopacific: from East Africa to the Hawaiian Islands and from southern Japan southward to Australia.

### RELATED SPECIES

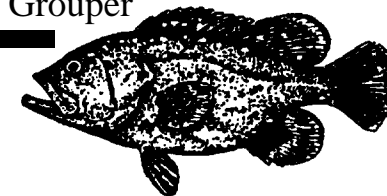
The ehu is a member of the Snapper Fish Family which includes other commercially important species such as onaga and opakapaka. Collectively known as Bottom Fish, these important food fish are captured by deep sea handline.

The following table will give you an idea of how fast these fish grow and how old they are. Please note that these are just ball park figures and meant only to give you a general idea on the relationship of length, weight, and age.

<i>Length, Weight and Age of Ehu</i>		
Fork Length (inches)	Weight (pounds)	Age (years)
6	0.2	1
10	0.5	2
11	0.8	2.75
12	1	3
15	2.3	4.6
18	4	6
20	5.5	7.5
22	6.7	9
23	7.8	10
23.5	8.5	11
24	9	12

## Hapu'upu'u, Sea Bass, Seale's Grouper

*Epinephelus quernus*



### SIZES

**Length:** lengths of up to 4 feet

**Weight:** up to about 60 pounds

### BREEDING

**Sexual Maturity:** unknown.

**Spawning:** spawning season is possibly around winter.

### LIFESTYLE

**Habitat:** occurs in deep waters; usually between 11 to 208 fathoms.

**Diet:** Feeds mainly on fish and crustaceans

**Life Span:** unknown.

**Distribution:** Central Pacific. Endemic to the Hawaiian Islands and Johnston Island.

### RELATED SPECIES

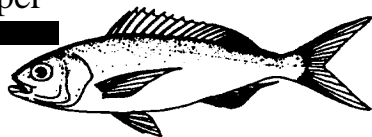
The hapu'upu'u is a member of the Grouper Fish Family and is a commercially important species. A related species is the giant grouper which grows to lengths of 7 feet or more. The hapu'upu'u is usually caught with handlines, but can also be caught with nets, and hook and lines. A good fish to eat with firm white flesh that can be prepared in any way.

The following table will give you an idea of how fast these fish grow and how old they are. Please note that these are just ball park figures and meant only to give you a general idea on the relationship of length, weight, and age.

<i>Length, Weight and Age of Hapu'upu'u</i>		
Total Length (inches)	Weight (pounds)	Age (years)
7	0.2	1
10	0.6	
12	1	2
15	2	
18	3.7	3
21	6	4
25	10	5
28	14.4	6
30	18	7
33	24	8
36	31.5	10
39	40	12
42	50.8	
45	63	
48	77	

## Kalekale, Von Sieboldi's Snapper

*Pristipomoides sieboldi*



### SIZES

**Length:** large specimens can reach up to 24 inches in length; commonly around 12 inches in length

**Weight:** up to about 6 pounds

### BREEDING

**Sexual Maturity:** unknown.

**Spawning:** unknown.

### LIFESTYLE

**Habitat:** deeper offshore water beyond the reef. Occurs over rocky bottoms; usually caught between 40 to 200 fathoms.

**Diet:** Feeds mainly on fish, shrimps, crabs, polychaetes, cephalopods, and urochordates

**Life Span:** unknown.

**Distribution:** Indopacific: from East Africa to Hawaii and northward to southern Japan.

### RELATED SPECIES

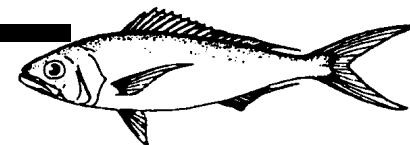
The kalekale is a member of the Snapper Fish Family which includes other commercially important species such as onaga and ehu. Collectively known as Bottom Fish, these important food fish are captured by deep sea handline. Often confused with opakapaka, these fish are generally smaller and have a larger eye.

The following table will give you an idea of how fast these fish grow and how old they are. Please note that these are just ball park figures and meant only to give you a general idea on the relationship of length, weight, and age.

<i>Length, Weight and Age of Kalekale</i>		
Fork Length (inches)	Weight (pounds)	Age (years)
6	0.1	1
9	0.5	2
12	1	3
13	1.5	4
14	2	5
15	2.5	6
16	2.8	7
16.4	3	8
16.7	3.25	9
16.9	3.38	10
17	3.45	11
17.1	3.52	12

## Lehi, Lehe, Ironjaw Snapper

*Aphareus rutilans*



### SIZES

**Length:** large specimens will reach a length of at least 3 feet

**Weight:** up to about 30 pounds

### BREEDING

**Sexual Maturity:** unknown.

**Spawning:** spawning season possibly around September through February.

### LIFESTYLE

**Habitat:** inhabits reefs and rocky bottom areas usually between 60 to 100 fathoms.

**Diet:** feeds on fish, squid, and crustaceans

**Life Span:** unknown.

**Distribution:** Hawaii southward to Polynesia and westward across the entire tropical Pacific and Indian Oceans to the Red Sea.

### RELATED SPECIES

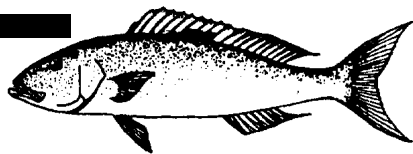
The lehi is a member of the Snapper Fish Family which includes other commercially important species such as onaga and ehu. Collectively known as Bottom Fish, these important food fish are captured by deep sea handline. An interesting fact about the lehi is that under the gill cover, the first outer gill filaments has a silver coating on it.

The following table will give you an idea of how fast these fish grow and how old they are. Please note that these are just ball park figures and meant only to give you a general idea on the relationship of length, weight, and age.

<i>Length, Weight and Age of Lehi</i>		
Fork Length (inches)	Weight (pounds)	Age (years)
10	0.5	1
16	2	2
20	4	3
25	7	4
28	10.5	5
31	14	6
34	18	7
36	22	8
38	25	9
39	28	10

## Uku, Gray Snapper

*Aprion virescens*



### SIZES

**Length:** up to 3 feet or more in length. Maximum length recorded at around 44 inches.

**Weight:** up to about 40 pounds; average weight about 10 to 12 pounds

### BREEDING

**Sexual Maturity:** both males and females generally reach spawning condition between 24 to 30 inches.

**Spawning:** spawning generally occurs during June.

### LIFESTYLE

**Habitat:** inhabits inshore reef areas from the surface down to a depth of 80 fathoms.

**Diet:** Feeds mainly on fishes, but also shrimp, crabs, cephalopods, and plankton organisms

**Life Span:** unknown

**Distribution:** Indopacific: from East Africa through Southeast Asia to Southern Japan and Hawaii, and southward to Australia.

### RELATED SPECIES

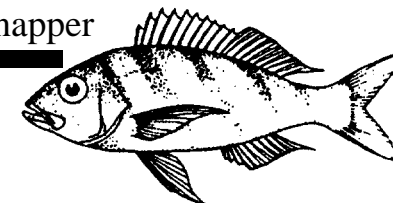
The uku is a member of the Snapper Fish Family which includes other commercially important species such as onaga and ehu. This is the only Hawaiian snapper that may be caught at or near the surface with lures. It is considered an excellent food and game fish. However, because of its nearshore feeding habits, this species has been implicated in a small handful of ciguatera attacks.

The following table will give you an idea of how fast these fish grow and how old they are. Please note that these are just ball park figures and meant only to give you a general idea on the relationship of length, weight, and age.

<i>Length, Weight and Age of Uku</i>		
Fork Length (inches)	Weight (pounds)	Age (years)
12	0.8	1
16	2	1.5
20	4.2	2
24	7.7	2.6
28	12.7	3.3
32	20	4
36	29	5.3

## Gindai, 'Ukikiki, Brigham's Snapper

*Pristipomoides zonatus*



### SIZES

**Length:** will reach up to 20 inches in length

**Weight:** up to about 6 pounds

### BREEDING

**Sexual Maturity:** Unknown

**Spawning:** probably around late summer.

### LIFESTYLE

**Habitat:** inhabits deeper offshore water beyond the reef. Occurs over rocky bottoms; usually found between 60 to 130 fathoms.

**Diet:** Feeds on fishes, shrimps, crabs, cephalopods, and other invertebrates

**Life Span:** unknown.

**Distribution:** Indopacific: from East Africa to the Hawaii and Tahiti, and from southern Japan southward to Australia and Lord Howe Island.

### RELATED SPECIES

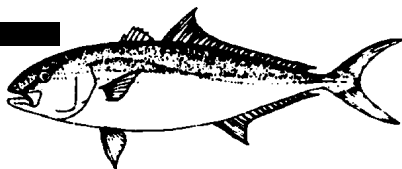
The gindai is a member of the Snapper Fish Family which includes other commercially important species such as onaga and opakapaka. Collectively known as Bottom Fish, these important food fish are captured by deep sea handline. The gindai, however, contributes little to the commercial catches.

The following table will give you an idea of how fast these fish grow and how old they are. Please note that these are just ball park figures and meant only to give you a general idea on the relationship of length, weight, and age.

<i>Length, Weight and Age of Gindai</i>		
Fork Length (inches)	Weight (pounds)	Age (years)
7	0.24	2
10	0.82	
14	1.95	3
15.8	3.15	4
16.6	3.65	5
16.8	3.83	6

## Kahala, Amberjack

*Seriola dumerili*



### SIZES

**Length:** will reach a length of up to 6 feet

**Weight:** up to about 120 pounds; maximum known weight is 178 pounds

### BREEDING

**Sexual Maturity:** females generally reach sexual maturity at a fork length of 21.3 inches.

**Spawning:** spawning occurs throughout the year with a peak in April.

### LIFESTYLE

**Habitat:** inhabits deep seaward reefs. Usually inhabits the inner reef as well the outer slopes of the island shelf.

**Diet:** Diurnal and nocturnal, feeds on fishes, squids, and other invertebrates

**Life Span:** maximum known age in captivity 4.5 years.

**Distribution:** Circumglobal. Indo-west Pacific, South Africa to Hawaii.

### RELATED SPECIES

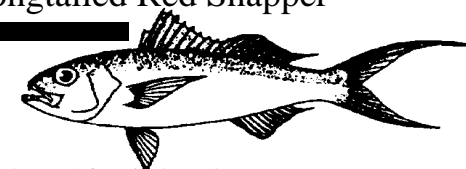
The kahala is a member of the Jack Fish Family which includes other species such as white ulua, omilu, kagami ulua, yellow ulua, menpachi ulua, butaguchi, omaka, opelu, akule, lae, and rainbow runner. It is a good food fish, however, it has been implicated in many incidents of ciguatera fish poisoning and should be tested before eating.

The following table will give you an idea of how fast these fish grow and how old they are. Please note that these are just ball park figures and meant only to give you a general idea on the relationship of length, weight, and age.

<i>Length, Weight and Age of Kahala</i>		
Fork Length (inches)	Weight (pounds)	Age (years)
15	1.9	1
27	10.7	2
36	25	3
42	39	4
46	51	5
50	65	6
52	73.4	7
54	82	8
55	86.6	9
56	91	10
57	96	11
58	101	14
60	112	14+

## Onaga, 'Ula, 'ula koa'e, Longtailed Red Snapper

*Etelis coruscans*



### SIZES

**Length:** large specimens will reach at least 3 feet in length

**Weight:** up to about 30 pounds

### BREEDING

**Sexual Maturity:** one fish reported to reach sexual maturity at about 20.6 inches

**Spawning:** ripe and near ripe ovaries were found in fish taken during months of August and September. Spawning season possibly similar to that of ehu.

### LIFESTYLE

**Habitat:** Inhabits deep rocky bottoms offshore. Known to occur between 80 to 250 fathoms. Usually caught on or near the bottom in areas of steep drop-offs, ledges, and pinnacles.

**Diet:** Mainly carnivorous, feeds on small fishes, squids, and crustaceans.

**Life Span:** unknown.

**Distribution:** Indopacific: from East Africa to the Hawaiian Islands and from southern Japan southward to Australia (Queensland and New South Wales) and Lord Howe Island.

### RELATED SPECIES

The onaga is a member of the Snapper Fish Family which includes other commercially important species such as opakapaka and ehu. Collectively known as Bottom Fish, these important food fish are caught throughout the year in Hawaii by deep sea handline.

The following table will give you an idea of how fast these fish grow and how old they are. Please note that these are just ball park figures and meant only to give you a general idea on the relationship of length, weight, and age.

<i>Length, Weight and Age of Onaga</i>		
Fork Length (inches)	Weight (pounds)	Age (years)
8	0.32	1.5
12	1.05	2.5
15	2.01	3.4
20	4.63	5
23	6.95	6
26	9.92	7.5
30	15.02	9.5
33	19.80	11.5
34	21.59	12
36	25.48	14